

P. Brunoski

1632

#12
L. Tyson
03-21-00

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

RECEIVED
MAR 16 2000
JC 1600 MAIL ROOM

1 <110> APPLICANT: BUMOL, Thomas Frank
2 DOU, Shenshen
3 GLASEBROOK, Andrew Lawrence
4 GOULD, Kenneth Elliot
5 HALE, John Edward
6 HEUER, Josef Georg
7 HUI, Kwan Yuk
8 KHARITONENKOV, Alexei
9 MIZRAHI, Jacques
10 NA, Songqing
11 NOBLITT, Timothy Wayne
12 REIDY, Charles Arthur
13 SONG, Ho Yeong
14 WANG, Jian
15 WU, Xiyang
16 ZUCKERMAN, Steven Harold
17 <120> TITLE OF INVENTION: THERAPEUTIC APPLICATIONS OF mFLINT POLYPEPTIDES
18 <130> FILE REFERENCE: 040902/0136
19 <140> CURRENT APPLICATION NUMBER: US/09/280,567A
20 <141> CURRENT FILING DATE: 1999-03-30
21 <150> EARLIER APPLICATION NUMBER: US 60/113,407
22 <151> EARLIER FILING DATE: 1998-12-22
23 <150> EARLIER APPLICATION NUMBER: US 60/112,933
24 <151> EARLIER FILING DATE: 1998-12-18
25 <150> EARLIER APPLICATION NUMBER: US 60/112,703
26 <151> EARLIER FILING DATE: 1998-12-18
27 <150> EARLIER APPLICATION NUMBER: US 60/112,577
28 <151> EARLIER FILING DATE: 1998-12-17
29 <150> EARLIER APPLICATION NUMBER: US 60/099,643
30 <151> EARLIER FILING DATE: 1998-09-09
31 <150> EARLIER APPLICATION NUMBER: US 60/086,074
32 <151> EARLIER FILING DATE: 1998-05-20
33 <150> EARLIER APPLICATION NUMBER: US 60/079,856
34 <151> EARLIER FILING DATE: 1998-03-30
35 <160> NUMBER OF SEQ ID NOS: 13
36 <170> SOFTWARE: PatentIn Ver. 2.0
37 <210> SEQ ID NO 1
38 <211> LENGTH: 900
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
41 <220> FEATURE:
42 <221> NAME/KEY: CDS
43 <222> LOCATION: (1)..(900)
44 <400> SEQUENCE: 1

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

45	atg	agg	gcg	ctg	gag	ggg	cca	ggc	ctg	tcg	ctg	ctg	tgc	ctg	gtg	ttg	48
46	Met	Arg	Ala	Leu	Glu	Gly	Pro	Gly	Leu	Ser	Leu	Leu	Cys	Leu	Val	Leu	
47	1				5				10				15				
48	gcg	ctg	cct	gcc	ctg	ctg	ccg	gtg	ccg	gct	gta	cgc	gga	gtg	gca	gaa	96
49	Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	Ala	Val	Arg	Gly	Val	Ala	Glu	
50				20					25				30				
51	aca	ccc	acc	tac	ccc	tgg	cgg	gac	gca	gag	aca	ggg	gag	cgg	ctg	gtg	144
52	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	Arg	Leu	Val	
53			35					40					45				
54	tgc	gcc	cag	tgc	ccc	cca	ggc	acc	ttt	gtg	cag	cgg	ccg	tgc	cgc	cga	192
55	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	Cys	Arg	Arg	
56		50					55					60					
57	gac	agc	ccc	acg	acg	tgt	ggc	ccg	tgt	cca	ccg	cgc	cac	tac	acg	cag	240
58	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	Tyr	Thr	Gln	
59		65				70					75					80	
60	ttc	tgg	aac	tac	ctg	gag	cgc	tgc	cgc	tac	tgc	aac	gtc	ctc	tgc	ggg	288
61	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	Leu	Cys	Gly	
62					85					90					95		
63	gag	cgt	gag	gag	gag	gca	cgg	gct	tgc	cac	gcc	acc	cac	aac	cgt	gcc	336
64	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	Asn	Arg	Ala	
65					100				105					110			
66	tgc	cgc	tgc	cgc	acc	ggc	ttc	ttc	gcg	cac	gct	ggt	ttc	tgc	ttg	gag	384
67	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	Cys	Leu	Glu	
68			115					120					125				
69	cac	gca	tcg	tgt	cca	cct	ggt	gcc	ggc	gtg	att	gcc	ccg	ggc	acc	ccc	432
70	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	Gly	Thr	Pro	
71		130					135					140					
72	agc	cag	aac	acg	cag	tgc	cag	ccg	tgc	ccc	cca	ggc	acc	ttc	tca	gcc	480
73	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	Phe	Ser	Ala	
74		145				150					155					160	
75	agc	agc	tcc	agc	tca	gag	cag	tgc	cag	ccc	cac	cgc	aac	tgc	acg	gcc	528
76	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	Cys	Thr	Ala	
77					165					170					175		
78	ctg	ggc	ctg	gcc	ctc	aat	gtg	cca	ggc	tct	tcc	tcc	cat	gac	acc	ctg	576
79	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	Asp	Thr	Leu	
80				180					185					190			
81	tgc	acc	agc	tgc	act	ggc	ttc	ccc	ctc	agc	acc	agg	gta	cca	gga	gct	624
82	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	Pro	Gly	Ala	
83			195					200					205				
84	gag	gag	tgt	gag	cgt	gcc	gtc	atc	gac	ttt	gtg	gct	ttc	cag	gac	atc	672
85	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	Gln	Asp	Ile	
86		210					215					220					
87	tcc	atc	aag	agg	ctg	cag	cgg	ctg	ctg	cag	gcc	ctc	gag	gcc	ccg	gag	720
88	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	Ala	Pro	Glu	
89		225				230					235					240	
90	ggc	tgg	ggt	ccg	aca	cca	agg	gcg	ggc	cgc	gcg	gcc	ttg	cag	ctg	aag	768
91	Gly	Trp	Gly	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	Gln	Leu	Lys	
92					245					250					255		
93	ctg	cgt	cgg	cgg	ctc	acg	gag	ctc	ctg	ggg	gcg	cag	gac	ggg	gcg	ctg	816
94	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	Gly	Ala	Leu	

PAGE: 3

RAW SEQUENCE LISTING PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

```

95          260          265          270
96      ctg gtg cgg ctg ctg cag gcg ctg cgc gtg gcc agg atg ccc ggg ctg      864
97      Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met Pro Gly Leu
98          275          280          285
99      gag cgg agc gtc cgt gag cgc ttc ctc cct gtg cac      900
100     Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
101          290          295          300
102 <210> SEQ ID NO 2
103 <211> LENGTH: 300
104 <212> TYPE: PRT
105 <213> ORGANISM: Homo sapiens
106 <400> SEQUENCE: 2
107     Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
108         1          5          10          15
109     Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
110         20          25          30
111     Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
112         35          40          45
113     Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
114         50          55          60
115     Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
116         65          70          75          80
117     Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
118         85          90          95
119     Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
120         100         105         110
121     Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
122         115         120         125
123     His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
124         130         135         140
125     Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
126         145         150         155         160
127     Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
128         165         170         175
129     Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
130         180         185         190
131     Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
132         195         200         205
133     Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile
134         210         215         220
135     Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu
136         225         230         235         240
137     Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys
138         245         250         255
139     Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu
140         260         265         270
141     Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met Pro Gly Leu
142         275         280         285
143     Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
144         290         295         300

```

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

```

145 <210> SEQ ID NO 3
146 <211> LENGTH: 936
147 <212> TYPE: DNA
148 <213> ORGANISM: Homo sapiens
149 <220> FEATURE:
150 <221> NAME/KEY: CDS
151 <222> LOCATION: (25)..(924)
152 <400> SEQUENCE: 3
153 gctctccctg ctccagcaag gacc atg agg gcg ctg gag ggg cca ggc ctg 51
154 Met Arg Ala Leu Glu Gly Pro Gly Leu
155 1 5
156 tcg ctg ctg tgc ctg gtg ttg gcg ctg cct gcc ctg ctg ccg gtg ccg 99
157 Ser Leu Leu Cys Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro
158 10 15 20 25
159 gct gta cgc gga gtg gca gaa aca ccc acc tac ccc tgg cgg gac gca 147
160 Ala Val Arg Gly Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala
161 30 35 40
162 gag aca ggg gag cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt 195
163 Glu Thr Gly Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe
164 45 50 55
165 gtg cag cgg ccg tgc cgc cga gac agc ccc acg acg tgt ggc ccg tgt 243
166 Val Gln Arg Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys
167 60 65 70
168 cca ccg cgc cac tac acg cag ttc tgg aac tac ctg gag cgc tgc cgc 291
169 Pro Pro Arg His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg
170 75 80 85
171 tac tgc aac gtc ctc tgc ggg gag cgt gag gag gag gca cgg gct tgc 339
172 Tyr Cys Asn Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys
173 90 95 100 105
174 cac gcc acc cac aac cgt gcc tgc cgc tgc cgc acc ggc ttc ttc gcg 387
175 His Ala Thr His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala
176 110 115 120
177 cac gct ggt ttc tgc ttg gag cac gca tcg tgt cca cct ggt gcc ggc 435
178 His Ala Gly Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly
179 125 130 135
180 gtg att gcc ccg ggc acc ccc agc cag aac acg cag tgc cag ccg tgc 483
181 Val Ile Ala Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys
182 140 145 150
183 ccc cca ggc acc ttc tca gcc agc agc tcc agc tca gag cag tgc cag 531
184 Pro Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln
185 155 160 165
186 ccc cac cgc aac tgc acg gcc ctg ggc ctg gcc ctc att gtg cca ggc 579
187 Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Ile Val Pro Gly
188 170 175 180 185
189 tct tcc tcc cat gac acc ctg tgc acc agc tgc act ggc ttc ccc ctc 627
190 Ser Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu
191 190 195 200
192 agc acc agg gta cca gga gct gag gag tgt gag cgt gcc gtc atc gac 675
193 Ser Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp
194 205 210 215

```

PAGE: 5

RAW SEQUENCE LISTING PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

```

195      ttt gtg gct ttc cag gac atc tcc atc aag agg ctg cag cgg ctg ctg      723
196      Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu
197              220              225              230
198      cag gcc ctc gag gcc ccg gag ggc tgg gct ccg aca cca agg gcg ggc      771
199      Gln Ala Leu Glu Ala Pro Glu Gly Trp Ala Pro Thr Pro Arg Ala Gly
200              235              240              245
201      cgc gcg gcc ttg cag ctg aag ctg cgt cgg cgg ctc acg gag ctc ctg      819
202      Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu
203      250              255              260              265
204      ggg gcg cag gac ggg gcg ctg ctg gtg cgg ctg ctg cag gcg ctg cgc      867
205      Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg
206              270              275              280
207      gtg gcc agg atg ccc ggg ctg gag cgg agc gtc cgt gag cgc ttc ctc      915
208      Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu
209              285              290              295
210      cct gtg cac tgatcctggc cc      936
211      Pro Val His
212              300
213      <210> SEQ ID NO 4
214      <211> LENGTH: 300
215      <212> TYPE: PRT
216      <213> ORGANISM: Homo sapiens
217      <400> SEQUENCE: 4
218      Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
219              1              5              10              15
220      Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
221              20              25              30
222      Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
223              35              40              45
224      Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
225              50              55              60
226      Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
227              65              70              75              80
228      Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
229              85              90              95
230      Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
231              100              105              110
232      Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
233              115              120              125
234      His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
235              130              135              140
236      Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
237              145              150              155              160
238      Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
239              165              170              175
240      Leu Gly Leu Ala Leu Ile Val Pro Gly Ser Ser Ser His Asp Thr Leu
241              180              185              190
242      Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
243              195              200              205
244      Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile

```

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/280,567A

DATE: 03/02/2000
TIME: 14:42:48

Input Set: I280567A.RAW

Line ? Error/Warning

Original Text
